

EACH BRIDGE CONSISTS OF

- 12 - 60' -0" TYPE II PSC BEAM SPANS ----- SPECIAL DESIGN
- 2 - PSC PILE END BENTS ----- SPECIAL DESIGN
- 11 - PSC PILE INTERMEDIATE BENTS ----- SPECIAL DESIGN
- 4 - END POST AND GUARDRAIL ATTACHMENT DETAIL ----- GA. STD. 3054 (9-30-02)  
(L = 4'-0"; W = 1'-1"; H = 2'-8")
- SQUARE PRESTRESSED CONCRETE PILES ----- GA. STD. 3215 (2-22-84)
- BAR BENDING DETAILS ----- GA. STD. 3901 (8-69)
- TYPICAL FILL DETAIL AT END OF BRIDGE ----- GA. STD. 9037 (9-99)

DRAINAGE DATA

DRAINAGE AREA ----- 189 SQ MILES			
FLOOD FREQUENCY	DISCHARGE	MEAN VELOCITY	AREA OF OPENING UNDER FLOODSTAGE
50 YEAR	7598 CFS	2.33 FPS	3,240 SQ FT
100 YEAR	9095 CFS	2.53 FPS	3,591 SQ FT
500 YEAR	13017 CFS	2.99 FPS	4,352 SQ FT

CONSTRUCTION SEQUENCE

EXISTING BRIDGE TO REMAIN OPEN TO TRAFFIC UNTIL COMPLETION OF PROPOSED RIGHT BRIDGE. TRAFFIC SHALL THEN BE SHIFTED TO RIGHT BRIDGE AND THE EXISTING BRIDGE SHALL BE REMOVED. CONSTRUCT PROPOSED LEFT BRIDGE. OPEN BOTH BRIDGES TO TRAFFIC.

THE AFOREMENTIONED SEQUENCE SHALL BE COORDINATED WITH ROADWAY OPERATIONS, SEE ROADWAY PLANS, IN LIEU OF THE ABOVE CONSTRUCTION SEQUENCE, THE CONTRACTOR MAY SUBMIT A PROPOSED CONSTRUCTION SEQUENCE FOR APPROVAL.

TRAFFIC DATA

TRAFFIC ----- ADT = 31,400 (2004)  
ADT = 53,450 (2024)

DESIGN SPEED ----- 65 MPH

TRUCKS ----- 6 %

24 HR TRUCKS ----- 8 %

DIRECTIONAL ----- 62/38

UTILITIES

NONE

DESIGN DATA

SPECIFICATIONS ----- AASHTO 17TH EDITION, 2002  
(DESIGNED FOR SEISMIC PERFORMANCE CATEGORY A)

TYPICAL HS20-44 AND/OR MILITARY LOADING ----- IMPACT ALLOWED

FUTURE PAVING ALLOWANCE ----- 30 LBS PER SQ FT

CONCRETE: SUPERSTRUCTURE ----- CLASS AA,  $f'_c$  = 3,500 PSI

PSC BEAMS ----- CLASS AAA,  $f'_c$  = 8,000 PSI

PSC BEAM ALLOWABLE TENSION ----- 537 PSI

SUBSTRUCTURE ----- CLASS A,  $f'_c$  = 3,000 PSI

REINFORCEMENT STEEL: ----- GRADE 60,  $f_y$  = 60,000 PSI

PRETENSIONING STRANDS: -----  $f'_s$  = 270,000 PSI

GENERAL NOTES

SPECIFICATIONS - GEORGIA STANDARD SPECIFICATIONS, 2001 EDITION, AS MODIFIED BY CONTRACT DOCUMENTS.

REINFORCING STEEL - PLACE AND TIE ALL REINFORCING STEEL IN ACCORDANCE WITH THE GEORGIA DOT SPECIFICATIONS. DO NOT WELD REINFORCING STEEL.

CHAMFER - CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" UNLESS OTHERWISE NOTED.

TRAFFIC CONTROLS - SEE ROADWAY PLANS FOR TRAFFIC CONTROLS AND TRAFFIC CONTROL PAYMENT.

EXISTING BRIDGE PLANS - ORIGINAL BRIDGE PLANS ARE NOT AVAILABLE.

WAITING PERIOD - NONE REQUIRED.

PLAN DRIVING OBJECTIVE - SEE SUBSTRUCTURE DETAILS.

PILING - JETTING OR SPUDDING OF PSC PILING MAY BE NECESSARY AT THIS SITE TO ACHIEVE THE INDICATED PLAN DRIVING OBJECTIVE. AT CONTRACTOR'S OPTION, USE PREDRILLING IN LIEU OF JETTING OR SPUDDING. THE EXTENT OF PREDRILLING SHALL BE NO DEEPER THAN THE TIP ELEVATION SHOWN. SEE SECTION 520 OF THE GEORGIA DOT SPECIFICATIONS.

BENT NUMBER	PILE TIP ELEVATION
1	141.00
2-6	118.00
7-9	108.00
10-12	118.00
13	133.00

TEST PILES - DRIVE TEST PILES AT THE FOLLOWING LOCATIONS:

ONE 16 IN SQ PSC X 54 FT AT BENT 13 (RIGHT BRIDGE)

ONE 20 IN SQ PSC X 55 FT AT BENT 2 (LEFT BRIDGE)

ONE 20 IN SQ PSC X 55 FT AT BENT 4 (RIGHT BRIDGE)

ONE 20 IN SQ PSC X 45 FT AT BENT 6 (RIGHT BRIDGE)

ONE 20 IN SQ PSC X 55 FT AT BENT 8 (LEFT BRIDGE)

ONE 20 IN SQ PSC X 50 FT AT BENT 10 (RIGHT BRIDGE)

SMOOTH DOWEL BARS - PLACE SMOOTH DOWEL BARS IN FORMED 3" DIAMETER X 12" DEEP HOLES AND GROUT IN PLACE SIMILAR TO ANCHOR BOLTS, SEE SUB-SECTION 501.3.05.B.3 OF THE GEORGIA DOT SPECIFICATIONS. STIRRUPS MAY BE SHIFTED SLIGHTLY TO CLEAR FORMED HOLES.

GROOVED CONCRETE - GROOVE THE ENTIRE LENGTH OF THE BRIDGE TRANSVERSELY AS PER SUB-SECTION 500.3.05.T.9.C OF THE GEORGIA DOT SPECIFICATIONS.

WELDING - ALL WELDING ON GEORGIA DOT PROJECTS SHALL BE PERFORMED BY CERTIFIED WELDERS THAT HAVE IN THEIR POSSESSION A CURRENT WELDING CERTIFICATION CARD ISSUED BY THE OFFICE OF MATERIALS AND RESEARCH. USE ONLY E70XX (EXCLUDING E7014 AND E7024) LOW HYDROGEN ELECTRODES FOR MANUAL SHIELDED METAL ARC WELDING.

SALVAGE MATERIAL - NO MATERIAL REMOVED FROM THE EXISTING STRUCTURE SHALL BE SALVAGED FOR USE BY THE GEORGIA DOT.

INCIDENTAL ITEMS - INCLUDE THE COST INCIDENTAL TO THE WORK THAT IS NOT SPECIFICALLY COVERED BY THE GEORGIA STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND/OR SPECIAL PROVISIONS IN THE OVERALL BID SUBMITTED. THIS INCLUDES THE COST OF WATERPROOFING, JOINT FILLERS, AND OTHER INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK.

SUMMARY OF QUANTITIES

PAY ITEM NUMBER	QUANTITIES		UNIT	PAY ITEM
	LEFT BRIDGE	RIGHT BRIDGE		
500-0100	2880	2880	SY	GROOVED CONCRETE
500-1006	LUMP	----	LS	SUPERSTR CONCRETE, CL AA, BR NO - I LT (824)
500-1006	----	LUMP	LS	SUPERSTR CONCRETE, CL AA, BR NO - I RT (824)
500-2100	1428	1428	LF	CONCRETE BARRIER
500-3101	140	140	CY	CLASS A CONCRETE
507-9002	3559	----	LF	PSC BEAMS, AASHTO TYPE II, BR NO - I LT
507-9002	----	3559	LF	PSC BEAMS, AASHTO TYPE II, BR NO - I RT
511-1000	16161	16161	LB	BAR REINF STEEL
511-3000	LUMP	----	LS	SUPERSTR REINF STEEL, BR NO - I LT (222001)
511-3000	----	LUMP	LS	SUPERSTR REINF STEEL, BR NO - I RT (222001)
520-2216	310	260	LF	PILING, PSC, 16 IN SQ
520-2220	2450	2410	LF	PILING, PSC, 20 IN SQ
520-3216	----	1	EA	TEST PILE, PSC, 16 IN SQ
520-3220	2	3	EA	TEST PILE, PSC, 20 IN SQ
520-4216	1	1	EA	LOAD TEST, PSC, 16 IN SQ (IF REQD)
520-4220	1	1	EA	LOAD TEST, PSC, 20 IN SQ (IF REQD)
540-1102	LUMP	----		REMOVAL OF EXISTING BRIDGE, BR NO - I LT
603-2024	306	306	SY	STN DUMPED RIP RAP, TP I, 24 IN
603-7000	306	306	SY	PLASTIC FILTER FABRIC

BRIDGE NO. I LT. AND RT.

MA

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REVISIONS			
BY	DESCRIPTION	DATE	Δ

DESIGNED	EJC
DRAWN	DAW
CHECKED	QSJ
GDOT LIAISON	
REVIEWED	WEI
APPROVED	PVL
SCALE : NONE	
AUGUST 2009	

GEORGIA DEPARTMENT OF TRANSPORTATION  
PRECONSTRUCTION DIVISION - OFFICE OF BRIDGE AND STRUCTURAL DESIGN

GENERAL NOTES  
SR 4 ( US I ) OVER PENDLETON CREEK  
EDS00-0545-00(014)  
TOOMBS/EMANUEL COUNTY

BRIDGE SHEET  
2 OF 13

DRAWING No.  
35-0002